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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
BATURAY, ALICIA	

ART UNIT	PAPER NUMBER
2446	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/004,116	RAMAN ET AL.	
	Examiner	Art Unit	
	Alicia Baturay	2446	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5,6,8,10,12,13,16 and 26-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5,6,8,10,12,13,16 and 26-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The instant application has been assigned to a new examiner. Please see conclusion section for updated contact information.

2. This Office Action is in response to the amendment filed 23 January 2009.

3. Claims 1, 5, 6, 8, 10, 12, 13 and 16 were amended.

4. Claims 2-4, 7, 9, 11, 14, 15 and 17-25 were cancelled.

5. Claims 26-32 were added.

6. Claims 1, 5, 6, 8, 10, 12, 13, 16 and 26-32 are pending in this Office Action.

Response to Amendment

7. Applicant's amendments and arguments with respect to claims 1, 5, 6, 8, 10, 12, 13 and 16 and new claims 26-32 filed on 23 January 2009 have been fully considered but they are deemed to be moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1, 5, 6, 8, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman et al. (U.S. 6,442,165) in view of Luther et al. (U.S. 2003/0023877) and further in view of O'Neill et al. (EP 1 137 236).

Sitaraman teaches the invention substantially as claimed including an apparatus which may be used in conjunction with components within a network access point to load balance the processing of the network access requests using the services of at least two instances of a particular service component type (see Sitaraman, Background of the Invention).

10. With respect to claims 1, 6 and 8, Sitaraman teaches a method of load balancing in a control node, the method comprising: determining a delay time between the control node and the downstream proxies, wherein the delay time is determined by the control node transmitting message to each of the downstream proxies in the plurality, the control node receiving a respective response message from each of the downstream proxies in the plurality, and the control node calculating, as the delay time, a difference between the transmission of each message and the receiving of each corresponding response message (Sitaraman, col. 6, lines 56-64); assigning a weight to each of the downstream proxies in the list, the weight based in part upon the respective calculated delay time for each downstream proxy (Sitaraman, col. 9, line 50 – col. 10, line 25); and distributing a traffic load to one of the plurality of downstream proxies based in part on the weight of each of the downstream proxies (Sitaraman, col. 4, lines 33-41).

Sitaraman does not explicitly teach use of the SIP protocol.

However, Luther teaches maintaining a list of downstream proxies, wherein the proxies implement the SIP protocol (Luther, page 1, paragraph 16); receiving, at the control node,

load information from a plurality of the downstream proxies in the list (Luther, page 6, paragraph 69); a respective SIP response message (Luther, page 6, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Luther in order to enable the use of the SIP protocol. One would be motivated to do so in order to provide a system and method of managing data transmission loads enabling substantially uniform distribution of incoming data packets among a plurality of data processing modules.

The combination of Sitaraman and Luther does not teach the use of an invalid SIP message.

However, O'Neill teaches an invalid SIP message (O'Neill, col. 9, paragraph 40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and Luther in view of O'Neill in order to enable the use of an invalid SIP protocol. One would be motivated to do so in order to provide for translation between address spaces. For instance, if a message is sent but not delivered to a user or location identified by an address identifier generated in accordance with the above method, the address identifier can be resolved back to its respective original address identifier and the message sent to the location associated with that original address by means of a service available over the first communications protocol.

11. With respect to claim 5, Sitaraman teaches the invention described in claim 5, including the method wherein the weight assigned to each downstream proxy is also based on a pre-weighting of each downstream proxy (Sitaraman, col. 9, line 50 – col. 10, line 25).

12. With respect to claims 31 and 32, Sitaraman teaches the invention described in claim 6, including a method of load balancing in a control node, the method comprising: determining a delay time between the control node and the downstream proxies, wherein the delay time is determined by the control node transmitting message to each of the downstream proxies in the plurality, the control node receiving a respective response message from each of the downstream proxies in the plurality, and the control node calculating, as the delay time, a difference between the transmission of each message and the receiving of each corresponding response message (Sitaraman, col. 6, lines 56-64); assigning a weight to each of the downstream proxies in the list, the weight based in part upon the respective calculated delay time for each downstream proxy (Sitaraman, col. 9, line 50 – col. 10, line 25); and distributing a traffic load to one of the plurality of downstream proxies based in part on the weight of each of the downstream proxies (Sitaraman, col. 4, lines 33-41).

Sitaraman does not explicitly teach querying a process at each respective proxy.

However, Luther teaches maintaining a list of downstream proxies, wherein the proxies implement the SIP protocol (Luther, page 1, paragraph 16); receiving, at the control node, load information from a plurality of the downstream proxies in the list (Luther, page 6, paragraph 69); a respective SIP response message (Luther, page 6, paragraph 69) and the method wherein the load information received from each of the plurality of downstream proxies is determined by querying a process at each respective proxy (Luther, page 6, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Luther in order to enable querying a process at

each respective proxy. One would be motivated to do so in order to provide a system and method of managing data transmission loads enabling substantially uniform distribution of incoming data packets among a plurality of data processing modules.

13. Claims 10, 13, 16, 26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman and further in view of Zisapel et al. (U.S. 6,665,702).

14. With respect to claims 10, 13 and 26, Sitaraman teaches a method for assigning weights to a group of proxies, wherein a control node is coupled to the group of proxies and the control node maintains a threshold value, the method comprising the steps of: sending, from the control node, a message to each of the proxies; receiving a reply from each of the proxies, wherein each reply is in response to the respective message sent to the proxies; determining a response time for each of the messages sent to each of the proxies (Sitaraman, col. 6, lines 56-64); assigning a weight to each of the proxies based on the response time of the message sent to the proxies (Sitaraman, col. 9, line 50 – col. 10, line 25).

Sitaraman does not explicitly teach use of the round robin method.

However, Zisapel teaches receiving a new call; determining a call volume; if the call volume is below the threshold value, assigning the new call to a given proxy of the group of proxies based on a round robin protocol; and if the call volume is above the threshold value, assigning the new call to the given proxy of the group of proxies based upon the weights assigned to each proxy (Zisapel, col. 1, lines 24-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Zisapel in order to enable the use of the round robin method. One would be motivated to do so in order to provide for reduced latency, fewer hops, or provide more processing capacity at the server.

15. With respect to claim 16, Sitaraman teaches the invention described in claim 13, including the system wherein the weights for the respective proxy is also based on a parameter of the respective proxy (Sitaraman, col. 4, lines 33-41).

Sitaraman does not explicitly teach use of the loading of the respective proxy.

However, Luther teaches wherein the control node receives messages from each respective proxy of the plurality of proxies, each message indicating the loading of the respective proxy (Luther, page 6, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Luther in order to enable the use of the loading of the respective proxy. One would be motivated to do so in order to provide a system and method of managing data transmission loads enabling substantially uniform distribution of incoming data packets among a plurality of data processing modules.

16. With respect to claim 29, Sitaraman teaches the invention described in claim 26, including the method wherein the control node assigns weights to the first proxy and the second proxy also based on a pre-weighting of the first proxy and the second proxy (Sitaraman, col. 9, line 50 – col. 10, line 25).

17. Claims 12 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman in view of Zisapel and further in view of O'Neill.

18. With respect to claim 12, Sitaraman teaches the invention described in claim 10, including a method for assigning weights to a group of proxies, wherein a control node is coupled to the group of proxies and the control node maintains a threshold value, the method comprising the steps of: sending, from the control node, a message to each of the proxies; receiving a reply from each of the proxies, wherein each reply is in response to the respective message sent to the proxies; determining a response time for each of the messages sent to each of the proxies (Sitaraman, col. 6, lines 56-64); assigning a weight to each of the proxies based on the response time of the message sent to the proxies (Sitaraman, col. 9, line 50 – col. 10, line 25).

Sitaraman does not explicitly teach use of the round robin method.

However, Zisapel teaches receiving a new call; determining a call volume; if the call volume is below the threshold value, assigning the new call to a given proxy of the group of proxies based on a round robin protocol; and if the call volume is above the threshold value, assigning the new call to the given proxy of the group of proxies based upon the weights assigned to each proxy (Zisapel, col. 1, lines 24-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Zisapel in order to enable the use of the round robin method. One would be motivated to do so in order to provide for reduced latency, fewer hops, or provide more processing capacity at the server.

The combination of Sitaraman and Zisapel does not teach the use of a SIP INVITE message.

However, O'Neill teaches the method wherein the messages sent to the proxies are a SIP INVITE message (O'Neill, col. 9, paragraph 39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and Zisapel in view of O'Neill in order to enable the use of a SIP INVITE message. One would be motivated to do so in order to provide for translation between address spaces. For instance, if a message is sent but not delivered to a user or location identified by an address identifier generated in accordance with the above method, the address identifier can be resolved back to its respective original address identifier and the message sent to the location associated with that original address by means of a service available over the first communications protocol.

19. With respect to claim 27, Sitaraman teaches the invention described in claim 26, including a method for assigning weights to a group of proxies, wherein a control node is coupled to the group of proxies and the control node maintains a threshold value, the method comprising the steps of: sending, from the control node, a message to each of the proxies; receiving a reply from each of the proxies, wherein each reply is in response to the respective message sent to the proxies; determining a response time for each of the messages sent to each of the proxies (Sitaraman, col. 6, lines 56-64); assigning a weight to each of the proxies based on the response time of the message sent to the proxies (Sitaraman, col. 9, line 50 – col. 10, line 25).

Sitaraman does not explicitly teach use of the round robin method.

However, Zisapel teaches receiving a new call; determining a call volume; if the call volume is below the threshold value, assigning the new call to a given proxy of the group of proxies based on a round robin protocol; and if the call volume is above the threshold value, assigning the new call to the given proxy of the group of proxies based upon the weights assigned to each proxy (Zisapel, col. 1, lines 24-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Zisapel in order to enable the use of the round robin method. One would be motivated to do so in order to provide for reduced latency, fewer hops, or provide more processing capacity at the server.

The combination of Sitaraman and Zisapel does not teach the use of a SIP INVITE message.

However, O'Neill teaches the method wherein the first message and the second message are INVITE messages (O'Neill, col. 9, paragraph 39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and Zisapel in view of O'Neill in order to enable the use of a SIP INVITE message. One would be motivated to do so in order to provide for translation between address spaces. For instance, if a message is sent but not delivered to a user or location identified by an address identifier generated in accordance with the above method, the address identifier can be resolved back to its respective original address identifier and the message sent to the location associated with that original address by means of a service available over the first communications protocol.

20. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman and in view of Zisapel in view of O'Neill and further in view of Schuster et al. (U.S. 6,577,622).

21. With respect to claim 28, Sitaraman teaches the invention described in claim 27, including a method for assigning weights to a group of proxies, wherein a control node is coupled to the group of proxies and the control node maintains a threshold value, the method comprising the steps of: sending, from the control node, a message to each of the proxies; receiving a reply from each of the proxies, wherein each reply is in response to the respective message sent to the proxies; determining a response time for each of the messages sent to each of the proxies (Sitaraman, col. 6, lines 56-64); assigning a weight to each of the proxies based on the response time of the message sent to the proxies (Sitaraman, col. 9, line 50 – col. 10, line 25).

Sitaraman does not explicitly teach use of the round robin method.

However, Zisapel teaches receiving a new call; determining a call volume; if the call volume is below the threshold value, assigning the new call to a given proxy of the group of proxies based on a round robin protocol; and if the call volume is above the threshold value, assigning the new call to the given proxy of the group of proxies based upon the weights assigned to each proxy (Zisapel, col. 1, lines 24-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Zisapel in order to enable the use of the round robin method. One would be motivated to do so in order to provide for reduced latency, fewer hops, or provide more processing capacity at the server.

The combination of Sitaraman and Zisapel does not teach the use of a SIP INVITE message.

However, O'Neill teaches the method wherein the first message and the second message are INVITE messages (O'Neill, col. 9, paragraph 39) and the method wherein the first message and the second message are bad INVITE messages (O'Neill, col. 10, paragraphs 39 and 40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and Zisapel in view of O'Neill in order to enable the use of a SIP INVITE message. One would be motivated to do so in order to provide for translation between address spaces. For instance, if a message is sent but not delivered to a user or location identified by an address identifier generated in accordance with the above method, the address identifier can be resolved back to its respective original address identifier and the message sent to the location associated with that original address by means of a service available over the first communications protocol.

The combination of Sitaraman, Zisapel and O'Neill do not teach the use of REJECT messages.

However, Schuster teaches wherein the first reply and the second reply are REJECT messages (Schuster, col. 20, line 66 - col. 21, line 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman, Zisapel and O'Neill in view of Schuster in order to enable the use of REJECT messages. One would be motivated to do so in order to

provide features and capabilities to telephone service that create new opportunities for users and for service providers.

22. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sitaraman and in view of Zisapel and further in view of Luther.

23. With respect to claim 30, Sitaraman teaches the invention described in claim 26, including a method for assigning weights to a group of proxies, wherein a control node is coupled to the group of proxies and the control node maintains a threshold value, the method comprising the steps of: sending, from the control node, a message to each of the proxies; receiving a reply from each of the proxies, wherein each reply is in response to the respective message sent to the proxies; determining a response time for each of the messages sent to each of the proxies (Sitaraman, col. 6, lines 56-64); assigning a weight to each of the proxies based on the response time of the message sent to the proxies (Sitaraman, col. 9, line 50 – col. 10, line 25).

Sitaraman does not explicitly teach use of the round robin method.

However, Zisapel teaches receiving a new call; determining a call volume; if the call volume is below the threshold value, assigning the new call to a given proxy of the group of proxies based on a round robin protocol; and if the call volume is above the threshold value, assigning the new call to the given proxy of the group of proxies based upon the weights assigned to each proxy (Zisapel, col. 1, lines 24-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sitaraman in view of Zisapel in order to enable the use of the round robin method. One would be motivated to do so in order to provide for reduced latency, fewer hops, or provide more processing capacity at the server.

The combination of Sitaraman and Zisapel does not explicitly teach use of querying a process at each respective proxy.

However, Luther teaches and the method further comprising: querying a first process on the first proxy; and querying a second process on the second proxy, wherein the control node assigns weights to the first proxy and the second proxy also based information gathered from querying the first proxy and the second proxy (Luther, page 6, paragraph 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Sitaraman and Zisapel in view of Luther in order to enable querying a process at each respective proxy. One would be motivated to do so in order to provide a system and method of managing data transmission loads enabling substantially uniform distribution of incoming data packets among a plurality of data processing modules.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at 7:30am - 5pm, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Pwu can be reached on (571) 272-6798. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay
September 1, 2009

/KAMAL B DIVECHA/

Examiner, Art Unit 2451